positioned within the holder **438** above the chamber **410**. Advantageously, the block **419** is adapted with a recess or generally concave-shaped lower surface portion, so that a gas plenum **421** is defined by the lower surface of the block **419** and the upper end or surface of the chamber **410**. Advantageously, the boundary between the block **419** and chamber **410** is sealed (e.g., with an o-ring, gasket or other sealing means). A ring **423** in threaded engagement with the holder **438** may help retain the block **419** sealed and in place against chamber **410** when oxygen gas from the supply assembly **412** is introduced into the plenum **421** through a gas inlet port in the block **419**. From the plenum **421** gas may enter the chamber **410** through the filter **414** disposed along a port through the cap **417**. Advantageously, gas pressure within the plenum **421** and the chamber **410** are about equal.

Advantageously, the chamber **410** and other system components include one or more sensors, e.g., fluid level sensors, pressure tranducers, etc., (not shown in Fig. 11) to enable the monitoring of system status during operation. Advantageously, the sensors and various system components are coupled to a processing and control assembly **436** including electronic circuitry to enable the sending and receiving of signal inputs and/or control commands amongst one or more of the various system components. A display assembly **440** coupled to the processing and control assembly **436** may serve as a separate user interface for the input of data and/or process control commands and/or for the display of system status and/or processing outputs.

For the sake of clarity and convenience, oxygen-supersaturated fluid supply assemblies such as the ones shown in Figures 10 and 11 have been described including liquid atomizing assemblies. However, other means for contacting the liquid and gas may be used. For example,